

## REMARKS

The Office Action of September 16, 2008 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Claims 1-6 and 13-18 were pending prior to the instant amendment, with claims 7-12 and 19-24 having been cancelled previously. By this amendment, claims 1-3 and 13-15 have been amended. Consequently, claims 1-6 and 13-18 are currently pending in the instant application, with claims 1-3 and 13-15 independent.

In the Office Action, claims 1-3, 6, 13-15 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,448,578 to Shimada et al. (Shimada) in view of U.S. Patent No. 6,573,955 to Murade (Murade); claims 4 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimada in view of Murade as applied to claims 1-3 and 13-15 above and further in view of U.S. Pat. Pub. 2003/0107039 to Jung et al. (Jung); and claims 5 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimada in view of Murade as applied to claims 1-3 and 13-15 above and further in view of U.S. Patent No. 6,956,236 to Sasaki et al. (Sasaki). Shimada, Murade, Jung and/or Sasaki, however, fail to render the claimed invention unpatentable. Each of the claims recite a specific combination of features that distinguishes the invention from the prior art in different ways. For example, independent claims 1-3 and 13-15 each recites a combination that includes, among other things:

a gate electrode layer formed over the layer comprising titanium; a gate insulating film formed in contact with a top surface of the gate electrode layer and a top surface of the layer comprising titanium.

(See, for example, FIG. 1A at 102, 103 and 132). At the very least, the applied references, whether taken alone or in combination, fail to disclose or suggest any of these exemplary features recited in independent claims 1-3 and 13-15.

The Examiner has failed to establish a *prima facie* case of obviousness for at least four reasons. First, the Examiner has not demonstrated how Shimada, Murade, Jung and/or Sasaki, whether taken alone or in combination, disclose or suggest each and every feature recited in the claims. *See* M.P.E.P. § 2143 (7th ed. 1998). Second, the Examiner has not shown the existence of any reasonable probability of success in modifying Shimada, the base reference, based on the teachings of Murade, Jung and/or Sasaki, the secondary references, in a manner that could somehow result in the claimed invention. *See id.* Third, the Examiner has not identified any suggestion or motivation, either in the teachings of the applied references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the apparatus of Shimada in a manner that could somehow result in the claimed invention. *See id.* Finally, the Examiner has not explained how his obviousness rationale could be found in the prior art — rather than being a hindsight reconstruction of Applicants' own disclosure. *See id.*

Each of the Examiner's factual conclusions must be supported by “substantial evidence” in the documentary record, as required by the Federal Circuit. *See In re Lee*, 61 U.S.P.Q.2d 1430, 1435 (Fed. Cir. 2002). The Examiner has the burden of documenting all findings of fact necessary to support a conclusion of anticipation or obviousness “less the ‘haze of so-called expertise’ acquire insulation from accountability.” *Id.* To satisfy this burden, the Examiner must specifically identify where support is found within the prior art to meet the requirements of 35 U.S.C. §§ 102(b) and 103. In this case, however, the Examiner has failed to satisfy his burden of demonstrating how Shimada, taken alone or in combination

with Murade, Jung and Sasaki, can either anticipate or render obvious each and every one of the limitations present in independent claims 1-3 and 13-15, as required by the M.P.E.P. and Federal Circuit jurisprudence.

Shimada discusses a thin-film transistor and liquid crystal display device. The Examiner asserts that Shimada discloses in reference numerals 3a, 3, and 11 the layer comprising titanium, the gate electrode, and the gate insulating film of the claimed invention, respectively. However, although the gate insulating film may be in contact with a top surface of the gate electrode, Shimada fails to teach or suggest the features of the gate insulating film being in contact with a top surface of the layer comprising titanium, as presently claimed.

The Examiner attempts to remedy the deficiencies of Shimada by turning to Murade. Murade discusses a capacitance substrate for a liquid crystal device and projection type display device. However, Murade fails to disclose or suggest the features of the gate insulating film is in contact with a top surface of the gate electrode and a top surface of the layer comprising titanium, as recited in claims 1-3 and 13-15.

In accordance with the M.P.E.P. § 2143.03, to establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 409 F.2d 981, 180 USPQ 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 196 (CCPA 1970). Therefore, it is respectfully submitted that neither Shimada, Murade, Jung nor Sasaki, taken alone or in any proper combination, discloses or suggests the subject matter as recited in claims 1-3 and 13-15. Hence, withdrawal of the rejection is respectfully requested.

Claims 4-6 depend from independent claims 1-3 and are patentable over the cited prior art for at least the same reasons as set forth above with respect to claims 1-3.

Claim 16-18 depend from independent claims 13-15 and is patentable over the cited prior art for at least the same reasons as set forth above with respect to claims 13-15.

In addition, each of the dependent claims also recite combinations that are separately patentable.

In view of the foregoing remarks, this claimed invention, as amended, is not rendered obvious in view of the prior art references cited against this application. Applicants therefore request the entry of this response, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

In discussing the specification, claims, and drawings in this response, it is to be understood that Applicants in no way intend to limit the scope of the claims to any exemplary embodiments described in the specification and/or shown in the drawings. Rather, Applicants are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

Should the Examiner believe that a telephone conference would expedite issuance of the application, the Examiner is respectfully invited to telephone the undersigned agent at (202) 585-8100.

Respectfully submitted,

/Sean A. Pryor, Reg. #48103/  
Sean A. Pryor

**NIXON PEABODY LLP**  
CUSTOMER NO.: 22204  
401 9th Street, N.W., Suite 900  
Washington, DC 20004  
Tel: 202-585-8000  
Fax: 202-585-8080